

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Pickle Creek

Water Body Segment at a Glance:

County: Ste. Genevieve
Nearby Cities: near Hawn State Park

Length of impaired

segment: 7.0 miles

Pollutant: pH

Source: Atmospheric Deposition

Water Body ID: 1755



Scheduled for TMDL development: 2012

Description of the Problem

Beneficial uses of Pickle Creek

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)
- Whole Body Contact Recreation

Use that is impaired

• Protection of Warm Water Aquatic Life

Standards that apply

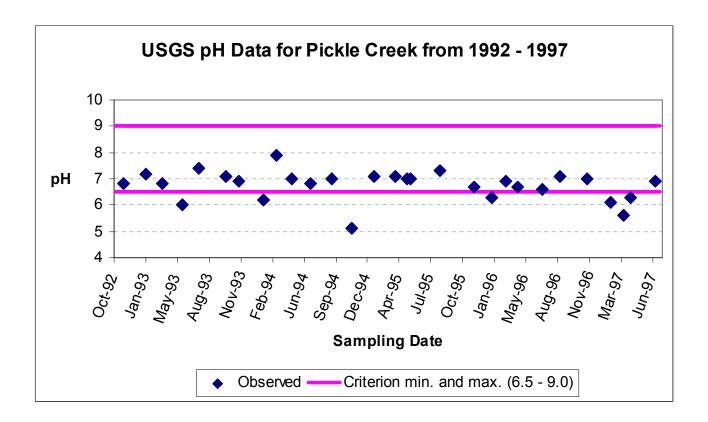
• Missouri Water Quality Standards for pH found in 10 CSR 20-7.031(3)(E) state that water contaminants shall not cause pH to be outside of the range of 6.5-9.0 SU (Standard Units).

Background information and water quality data

Pickle Creek is a small, rural stream that flows north east to join River aux Vases, which is a tributary to the Mississippi River in Ste. Genevieve County. Limestone, which is prevalent throughout Missouri, is alkaline and acts as a buffer for acid rain. As this watershed developed primarily in LaMotte sandstone, it is naturally very poorly buffered. There are no known anthropogenic sources of acidity in the watershed.

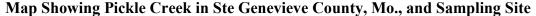
Acidic or alkaline waters can be toxic to aquatic life, so the criteria for pH is a range from 6.5-9.0. The evidence for the impairment is based on data gathered by the U.S. Geological Survey from 1992-1997. In that time, seven of 32 measurements (21.9 percent) failed to meet the criteria. This is greater than 10 percent, which is the guideline for judging impairment.

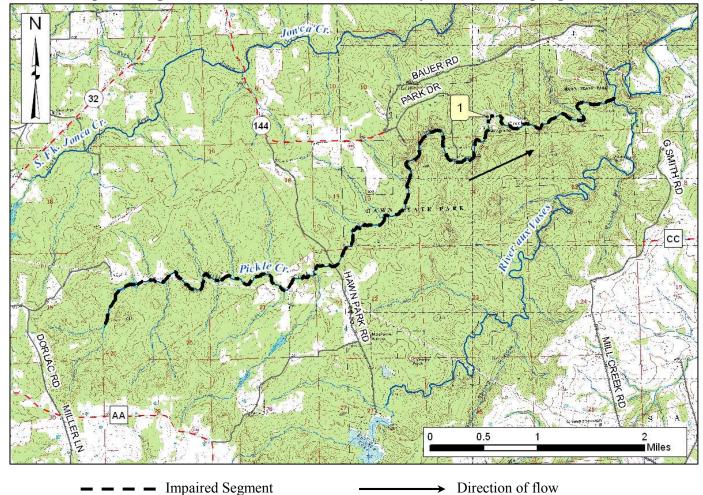
Revised 2/2010 1



A map of Pickle Creek with the location of the sampling site may be found on the next page.

Revised 2/2010 2





Sample Site 1 – Pickle Creek at Hawn State Park

For more information call or write:

Missouri Department of Natural Resources Water Protection Program P.O. Box 176, Jefferson City, MO 65102-0176 1-800-361-4827 or 573-751-1300 office 573-522-9920 fax

Program Home Page: www.dnr.mo.gov/env/wpp/index.html

Revised 2/2010 3